REMARKS

In response to the Office Action of September 15, 2005, Applicant has amended the claims, which when considered with the following remarks, is deemed to place the present application in condition for allowance. Favorable consideration and allowance of all pending claims is respectfully requested. The amendments to the claims have been made in the interest of expediting prosecution of this case. Applicant reserves the right to prosecute the same or similar subject matter in this or another application.

Initially, it is noted with appreciation the Examiner's note that original Claims 10-39 have been renumber as Claims 9-38 as original Claim 9 was missing. Thus, Claims 1-10, 19-24, and 26-38 and new Claim 39 are now pending in this application. By this Amendment, Claims 1, 3, 5, 9, 10, 27, 29, 36 and 38 have been amended and new Claim 39 has been added.

Prior to addressing the objections and rejections set forth in the Office Action, it is respectfully noted that all future correspondence and telephone calls for this application are to be directed to Michael E. Carmen, M. CARMEN & ASSOCIATES, PLLC, 170 Old Country Road – Suite 400, Mineola, New York 11501. A copy of Change of Attorney's Address in Application, filed September 8, 2005, and the postcard showing receipt of the filed Change of Attorney's Address in Application are attached hereto.

In the Office Action, the Examiner has indicated that Claims 9 and 10 have been objected to as being dependent upon a rejected base claim, but would be allowable over the prior art if rewritten in independent format including all of the limitations of the base claim and any intervening claim. Claim 9 has now been amended into independent format to include all of the limitations of the base claim and intervening claims and Claim 10 has been amended accordingly. Thus, immediate allowance of Claims 9 and 10 is warranted and such is

respectfully requested. Also, new Claim 39 has been added to recite a system containing substantially the same limitations as the method of Claim 9. Thus, it is also believed that new Claim 39 is allowable. Accordingly, immediate allowance of new Claim 39 is respectfully requested.

In the Office Action, the Examiner has withdrawn Claims 11-18 and 25 from consideration pursuant to 37 C.F.R. §1.142(b) as being drawn to a nonelected species. Accordingly, Claims 11-18 and 25 have been cancelled without prejudice. Applicant reserves the right to file one or more divisional application to Claims 11-18 and 25. Applicant respectfully submits that no new matter has been added to this application. Moreover, it is believed that the claims as presented herein places the application in condition for immediate allowance.

The Examiner has objected to Claims 1-10, 19-24 and 26-38, and specifically Claims 1, 3, 5, 26, 27, 29, 36 and 38 for certain informalities. Although not necessarily agreeing with the Examiner, applicant has amended Claims 1, 3, 5, 27, 29, 36 and 38 in a manner believed to obviate the Examiner's objections. However, with respect to an objection to Claims 5 and 36, it is the Examiner's belief that a colon should be inserted after the term "consisting of". It is respectfully submitted that the term "consisting of" in Claims 5 and 36 is used in a Markush group format as exemplified in sections 803.02 and 2173.05(h) of the Manual of Patent Examining Procedure (MPEP). As such, the term "consisting of" as used in Claims 5 and 36 is written in compliance with MPEP guidelines.

With respect to the objection of Claim 26, lines 1and 2, for the recitation of the step (c) of automatically outputting the results of step (b), it is the Examiner's belief that Claim 1, step (c), does not previously recite an automated step. It is respectfully submitted that Claim 1 recites a

method for screening lubricating oil composition samples for dispersancy performance, *under program control*. Accordingly, the method is an automated method, performed under program control, such that the method is performed substantially without human intervention. In this manner, step (c) automatically outputs the results of step (b). However, to make it clear, step (c) of Claim 1 has been amended to recite "automatically outputting the results of step (b)". It is submitted that the scope of Claim 1 has not been narrowed by the amendment.

For the foregoing reasons, withdrawal of the objections is respectfully requested.

The Examiner has rejected Claims 4 and 37 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner alleges that "[i]n view of the fact that applicant elected ashless dispersant as a species in claims 3 and 36, claims 4 and 37 now fail to further limit the claimed invention."

However, it is a well established rule that "whether a claim is invalid for indefiniteness requires a determination whether those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Morton International Inc.* v. *Cardinal Chemical Co.*, 28 USPQ2d 1190, 1194-95 (CAFC 1993). The specification clearly sets forth on page 15, line 9, through page 20, line 17 numerous examples of ashless dispersants that can be employed in the claimed method and system. Thus, one skilled in the art would readily understand what is meant by the recitation "ashless dispersant" as presently recited in Claims 4 and 37 when reading the contents of the specification. Accordingly, the recitation "ashless dispersant", when read in light of the specification, is believed to be sufficiently clear and definite as to comply with the requirements for definiteness under the second paragraph of 35 U.S.C. §112 and withdrawal of the rejection is respectfully requested. It is respectfully submitted that if the Examiner considers

the claims allowable to the elected species, applicant will consider amending the claims accordingly.

The Examiner has rejected Claims 1-4, 6, 7 and 19-22 under 35 U.S.C. §102(b) as being anticipated by Martin U.S. Patent No. 4,427,834 ("Martin").

Nowhere does Martin disclose that a high throughput method for screening lubricating oil composition samples for dispersancy performance, under program control, comprising: (a) providing a plurality of different lubricating oil composition samples, each sample comprising: (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material; (b) measuring the dispersancy performance of each test sample to provide corresponding dispersancy performance data results; and (c) automatically outputting the results of step (b) as presently recited in amended Claim 1.

Rather, Martin discloses a lubricating composition containing a major amount of a lubricating oil and from 0.1 to about 15.0 weight percent of an oil-soluble product having the properties of both a viscosity-index improver and a dispersant can be assessed by a spot dispersancy test and shows the results in Table I. However, at no point is there any disclosure in Martin of a high throughput method for screening a plurality of lubricating oil composition samples for dispersancy performance. The high throughput method, as set forth in the present claims, is conducted under program control such that a relatively large number of different lubricating oil compositions can be rapidly prepared and screened for dispersancy performance. Instead, Martin merely discloses individually testing lubricating oil compositions containing an oil-soluble product for dispersancy performance via a non-automated process. As such, amended

Claims 1-4, 6, 7 and 19-22 clearly possess novel subject matter relative to Martin. Accordingly, withdrawal of the rejection is respectfully requested.

The Examiner has rejected Claims 1-8 and 28 under 35 U.S.C. §102(b) as being anticipated by Karll et al. U.S. Patent No. 4,384,138 ("Karll et al.").

Nowhere does Karll et al. disclose a high throughput method for screening lubricating oil composition samples for dispersancy performance, under program control, comprising: (a) providing a plurality of different lubricating oil composition samples, each sample comprising: (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material; (b) measuring the dispersancy performance of each test sample to provide corresponding dispersancy performance data results; and (c) automatically outputting the results of step (b) as presently recited in amended Claim 1.

Rather, Karll et al. disclose substituted phenol compositions useful in the manufacture of Mannich condensation products that can be employed in small amounts to improve the detergent or dispersancy properties of lubricating oils. Karll et al. further disclose evaluating each lubricating oil composition of Examples 1-3 as a dispersant addition agent using a spot dispersancy test. However, there is no disclosure in Karll et al. of a high throughput method for screening a plurality of lubricating oil composition samples for dispersancy performance under program control such that a relatively large number of different lubricating oil compositions can be rapidly prepared and screened for dispersancy performance. Instead, Karll et al. merely disclose individually testing lubricating oil compositions for dispersancy performance. As such, amended Claims 1-8 and 28 clearly possess novel subject matter relative to Karll et al. Accordingly, withdrawal of the rejection is respectfully requested.

The Examiner has rejected Claim 24 under 35 U.S.C. §103(a) as being obvious by Martin.

The deficiencies discussed above with respect to the rejection of Claim 1, from which Claim 24 ultimately depends, applies with equal force to this rejection. Specifically, as Martin nowhere discloses or suggests a high throughput method for screening lubricating oil composition samples for dispersancy performance, under program control, comprising (a) providing a plurality of different lubricating oil composition samples, each sample comprising: (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material; (b) measuring the dispersancy performance of each test sample to provide corresponding dispersancy performance data results; and (c) automatically outputting the results of step (b) as presently recited in amended Claim 1, Martin cannot disclose or suggest the additional step of homogenizing the samples by mechanical stirring as presently recited in Claim 24.

Rather, as discussed above, Martin simply discloses that the dispersancy of the oil-soluble product of the lubricating oil composition was assessed by a spot dispersancy test and shows the results in Table I. At no point, however, is there any disclosure, suggestion or even a hint in Martin of a high throughput method for screening lubricating oil composition samples for dispersancy performance much less the additional step of homogenizing the samples by mechanical stirring during the screening process. Instead, Martin merely discloses individually testing lubricating oil compositions containing the oil-soluble product for dispersancy performance utilizing a non-automated test.

Since Martin nowhere discloses or suggests a high throughput method conducted under program control, as set forth in the present claims, such that a relatively large number of different lubricating oil compositions can be rapidly prepared and screened for dispersancy performance, the presently recited high throughput method of Claim 24 is believed to be nonobvious, and therefore patentable, over Martin. Accordingly, withdrawal of the rejection is respectfully requested.

The Examiner has rejected Claims 26, 27, 29 and 35-38 under 35 U.S.C. §103(a) as being obvious over Martin in view of Kolosov et al. U.S. Patent Application Publication No. 2004/0123650 ("Kolosov et al.").

The deficiencies discussed above with respect to the rejection of Claim 1, from which Claims 26 and 27 ultimately depend, applies with equal force to this rejection. Specifically, Martin nowhere discloses or suggests a high throughput method for screening lubricating oil composition samples for dispersancy performance, under program control, comprising (a) providing a plurality of different lubricating oil composition samples, each sample comprising: (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material; (b) measuring the dispersancy performance of each test sample to provide corresponding dispersancy performance data results; and (c) automatically outputting the results of step (b) as presently recited in amended Claim 1, from which Claims 26 and 27 ultimately depend.

Rather, as discussed above, Martin simply discloses individually testing the dispersancy of an oil-soluble product of a lubricating oil composition by a spot dispersancy test and shows the results in Table I. Martin therefore provides a non-automated means for measuring the dispersancy performance of each test sample to provide corresponding dispersancy performance

data results. Thus, nothing in Martin would lead one skilled in the art to modify the spot dispersancy test for individually testing the lubricating oil samples disclosed therein to arrive at the high throughput method for screening lubricating oil composition samples for dispersancy performance, under program control, as set forth in amended Claim 1, from which Claims 26 and 27 ultimately depend.

Kolosov et al. does not cure and is not cited as curing the deficiencies of Martin. Instead, Kolosov et al. disclose a system and method for screening a library of a multitude of genera of material samples for rheological properties. The genera of material disclosed in Kolosov et al. which can be tested include polymeric materials, organic materials, amorphous materials, crystalline materials, macromolecular materials, small-molecule materials, inorganic materials, pure materials, mixtures of the materials, any commercial product itself or an ingredient or portion within a commercial product such as pharmaceuticals, coatings, cosmetics, adhesives, inks, foods, crop agents, detergents, protective agents, and lubricants, as well as gels, oils, solvents, greases, creams, foams and other whipped materials, ointments, pastes, powders, films, particles, bulk materials, dispersions, suspensions, and emulsions.

Kolosov et al. further disclose that the broad categories of flowable material may be tested and includes a large number of broad tests such as density, melt index, thermal degradation, aging characteristics, weight-average molecular weight, number-average molecular weight, viscosity-average molecular weight, peak molecular weight, approximate molecular weight, polydispersity index, molecular-weight-distribution shape, relative or absolute component concentration, conversion, concentration, mass, hydrodynamic radius, radius of gyration, chemical composition, amounts of residual monomer, presence and amounts of other low-molecular weight impurities in samples, particle or molecular size, intrinsic viscosity,

molecular shape, molecular conformation, and/or agglomeration or assemblage of molecules. According to Kolosov et al., any of the genera of flowable material can be subjected to any of the plurality of tests disclosed.

However, at no point is there any appreciation in Kolosov et al. of a high throughput method for screening a plurality of different lubricating oil composition samples, each sample containing (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material; for dispersancy performance, under program control, by measuring the dispersancy performance of each test sample to provide corresponding dispersancy performance data results; and then automatically outputting the results of step (b). Thus, nothing in Kolosov et al. would lead one skilled in the art to modify the spot dispersancy test disclosed in Martin carried out by individually testing the disclosed lubricating oil compositions containing the oil-soluble product for dispersancy performance by looking to the system and method for testing the genera of flowable material with any of the broad tests disclosed in Kolosov et al. and arrive at the specifically recited high throughput method for screening lubricating oil composition samples for dispersancy performance as presently recited in amended Claim 1, from which Claims 26 and 27 ultimately depend.

With respect to Claims 29, 35 and 36, Martin likewise nowhere discloses or suggests a high throughput system for screening lubricant performance, under program control, comprising (a) a plurality of test receptacles, each receptacle containing a different lubricating oil composition sample comprising (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material; (b) receptacle moving means for individually positioning

the test receptacles in a testing station for measurement of dispersancy performance of the respective sample; and (c) means for measuring the dispersancy performance of the sample in the testing station to obtain dispersancy performance data associated with the sample and for transferring the dispersancy performance data to a computer controller as presently recited in Claim 29.

Rather, Martin simply discloses individually testing an oil-soluble product of a lubricating oil composition by a spot dispersancy test for dispersancy performance utilizing a non-automated means for measuring the dispersancy performance. Thus, nothing in Martin would lead one skilled in the art to modify the non-automated test disclosed therein and arrive at the presently claimed high throughput system for screening lubricant performance, under program control.

Kolosov et al. does not cure and is not cited as curing the deficiencies of Martin. As discussed above, Kolosov et al. merely disclose a system and method for screening a library of a multitude of genera of material samples for rheological properties and includes a large number of broad tests.

However, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be a suggestion, motivation or teaching to those skilled in the art for such a combination. At no point is there any appreciation in Kolosov et al. of the presently claimed high throughput system for screening lubricating oil composition samples comprising (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material for dispersancy performance, under program control. Instead, Kolosov et al. simply disclose that a genera of flowable material can be subjected to a plurality of different tests. Thus, nothing in

Kolosov et al. would lead one skilled in the art to modify the spot dispersancy test disclosed in Martin carried out by individually testing the disclosed lubricating oil compositions containing the oil-soluble product for dispersancy performance via a non-automated test by looking to the system for testing the genera of flowable material with any of the broad tests disclosed in Kolosov et al. and arrive at the specifically recited high throughput system for screening lubricating oil composition samples comprising (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a base oil-insoluble material for dispersancy performance as presently recited in Claim 29.

With respect to Claim 38, as acknowledged by the Examiner, Martin provides no disclosure or suggestion of a combinatorial lubricating oil composition library comprising lubricating oil composition dispersancy data for a plurality of different lubricating oil compositions comprising (a) a major amount of a base oil of lubricating viscosity and (b) at least one lubricating oil additive. In order to cure the deficiencies of Martin, the Examiner alleges:

> The reference to Kolosov et al. discloses an apparatus for high throughput rheological testing of material. The reference discloses that the same apparatus is utilized to screen and categorize a library of samples. Providing the apparatus to construct a library of samples would have been obvious to one of ordinary skill in the art as a means of allowing one to cross reference unknown compositions with known samples for more accurate sampling and assessment.

However, there must be some teaching, motivation or suggestion to select and combine references relied upon as evidence of obviousness. As is the case here, Martin simply discloses individually testing lubricating oil compositions to evaluate the dispersancy of an oil soluble, star-shaped product and at no point provides any suggestion, motivation or even a hint of a combinatorial library formed by evaluating a relatively large number of different lubricating oil

compositions for dispersancy characteristic and then storing the results in a combinatorial library. Thus, one skilled in the art would not even look to the disclosure of Kolosov et al. to modify the disclosure of Martin and arrive at the presently claimed combinatorial library.

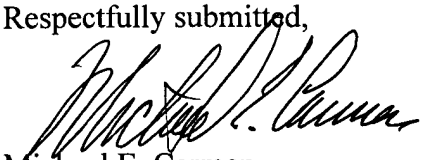
For the foregoing reasons, Claims 26, 27, 29 and 35-38 are believed to be nonobvious, and therefore patentable, over Martin and Kolosov et al. Accordingly, withdrawal of the rejection is respectfully requested.

The Examiner has rejected Claims 30, 31, 33 and 34 under 35 U.S.C. §103(a) as being obvious over Martin in view of Kolosov et al. and further in view of Cohen et al. U.S. Patent No. 6,451,259 ("Cohen et al.").

The deficiencies of Martin and Kolosov et al. discussed above with respect to Claim 29 apply with equal force to this rejection. Cohen et al. discloses an automated sample handler for an analytical instrument in which racks holding capped or uncapped test tubes or other containers are input into and output from the instrument. Cohen et al. clearly does not disclose or suggest a high throughput system for screening lubricant performance, under program control, as presently set forth in Claim 29, from which Claims 30, 31, 33 and 34 ultimately depend. Accordingly, Cohen et al. does not cure and is not cited as curing the above-noted deficiencies of Martin and Kolosov et al. Since Martin, Kolosov et al. and Cohen et al., alone or in combination, do not disclose or suggest the high throughput system of Claim 29 from which Claims 30, 31, 33 and 34 ultimately depend, Claims 30, 31, 33 and 34 are believed to be nonobvious, and therefore patentable, over Martin, Kolosov et al. and Cohen et al.

For the foregoing reasons, amended Claims 1-10, 19-24 and 26-38 and new Claim 39 as presented herein are believed to be in condition for allowance. Such early and favorable action is earnestly solicited.

Respectfully submitted,



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